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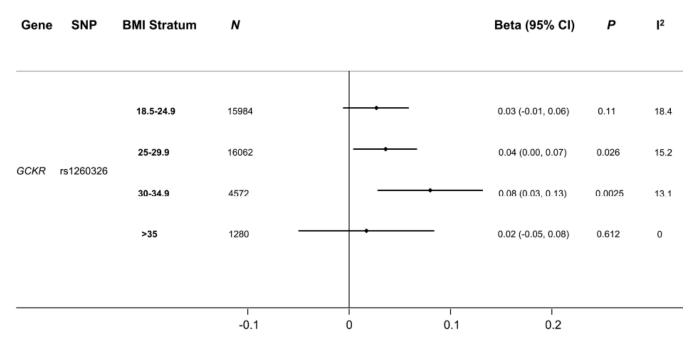
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Supplementary Table 1. Study descriptives and analysis metrics

Study	Genotyping method	N (SNPx BMI)	N* (SNP xPA)	PA measurement method*	Inactive*	% Male	Age (years)		2-h glucose (mmol/L)		BMI (kg/m²)	
					N (%)		mean	SD	mean	SD	mean	SD
ARIC	Affymetrix 6.0	5085	5085	Questionnaire	1133 (22.3)	44.8	62.8	5.6	7.2	2.3	27.9	4.9
BLSA	Illumina	464	708	Questionnaire	142 (20.1)	46	49.0	16.3	6.3	1.8	24.6	3.5
BotniaPPP	iPLEX Sequenom MassARRAY	2061	2057	Kuopio Ischemic heart Disease Questionnaire	271 (19.9)	47	46.1	15.4	5.1	1.5	25.9	4.0
CHS	Illumina Human Hap-370K chip	2724	2707	Questionnaire	542 (20.0)	38.8	72.2	5.3	7.6	2.3	26.2	4.2
CoLaus	Affymetrix 500K	425	465	Questionnaire	85 (18.3)	37.9	58.4	8.7	5.7	1.7	26.0	4.4
Ely	iPLEX Sequenom MassARRAY	1534	672	Flex HR Method	138 (20.2)	45.6	61.0	9.1	6.3	2.2	27.2	4.7
Fenland	Affymetrix 500K	1361	1320	Recent PA Questionnaire (leisure time component)	271 (19.9)	44.0	45.0	7.3	5.2	1.6	27.1	4.9
FUSION	Illumina HumanHap300	1113	871	Questionnaire	94 (10.8)	49.2	63.3	7.5	5.7	1.2	27.1	3.8
FUSION Stage 2	Sequenom iPLEX Gold SBE	670	NA	NA	NA	55.1	61.4	7.6	5.7	1.2	26.8	4.0
Framingham	Affymetrix	2694	2527	Framingham PA index	684 (27.1)	45.6	54.1	9.8	5.9	1.6	26.9	4.5
French Family Members	TaqMan	308	NA	NA	NA	47.1	37.9	8.5	5.1	0.5	29.7	7.1
French Hagueneau	TaqMan	1069	NA	NA	NA	50.0	23.0	3.7	5.3	1.2	23.4	4.0
GLACIER	iPLEX Sequenom MassARRAY	15557	15037	Umea EPIC PA Questionnaire	7243 (48.2)	40.0	52.3	8.7	6.8	1.5	26.0	4.0
Hertfordshire	iPLEX Sequenom MassARRAY	1863	459	Questionnaire	93 (20.2)	54.3	65.6	2.9	7.1	2.1	26.9	4.0

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Inter99	KASPar SNP Genotyping system (Kbiosciences)	5655	5547	Questionnaire	1110 (20.0)	49.5	45.9	7.9	6.0	1.5	26.1	4.3
METSIM	Sequenom iPLEX Gold SBE	5315	5315	Questionnaire	1289 (24.3)	100	58.4	6.5	6.1	1.7	26.8	3.7
NHANES	iPLEX Sequenom MassARRAY	513	522	Questionnaire	111 (21.3)	60.2	57.5	10.7	6.7	2.2	27.6	5.3
RISC	iPLEX Sequenom MassARRAY	1442	1339	Questionnaire	277 (20.7)	45.1	44.1	8.3	5.8	1.6	25.7	4
Roche	iPLEX Sequenom MassARRAY	590	NA	NA	NA	45.0	51.6	12.7	6.0	2.2	27.6	6.4
Sorbs	Affymetrix 500K	582	582	Questionnaire	330 (56.7)	40.3	47.5	15.9	5.3	2.1	26.8	4.7
ULSAM	Illumina Metabochip + BeadExpress	930	957	Questionnaire	36 (3.8)	100	71	0.6	7.3	2.3	26.1	3.2
Whitehall II	TaqMan	4306	4306	Questionnaire	973 (20.2)	73.0	60.5	5.8	6.4	1.8	26.5	4.0

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Supplementary Figure 1. The association of rs1260326 with 2-h glucose is shown in different BMI strata.

SNP association with 2-h glucose in BMI strata

Gene	SNP	BMI Stratum	N		Beta (95% CI)	P	I²
		18.5-24.9	15984		0.03 (-0.01, 0.06)	0.11	18.4
		25-29.9	16062		0.04 (0.00, 0.07)	0.026	15.2
GCKR	rs1260326	30-34.9	4572		0.08 (0.03, 0.13)	0.0025	13.1
		>35	1280		0.02 (-0.05, 0.08)	0.612	0

Per-allele difference in 2-h glucose (mmol/L)

-0.1   0   0.1   0.2